



THUNDER BASIN ORTHOPAEDICS  
— AND SPORTS MEDICINE —

# **Total Knee Arthroplasty Home Exercise Program**

## Knee Flexion Exercises:

### 1. Heel Slides

While lying down, slowly bend knee while sliding the heel up towards the buttocks and then sliding the heel back to the starting position. May use a towel around the foot to help pull the heel towards the buttocks while sitting up. Perform this exercise 20 times.



### 2. Sitting knee flexion

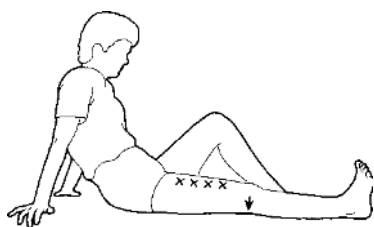
While sitting, cross legs at ankles with good leg in front. Push back with good leg to bend the knee until a stretch is felt.



## Knee Extension Exercises:

### 1. Quad Sets

While lying or sitting down with the knee straight, begin contracting the thigh muscle and hold for 5 seconds keeping the leg on the ground. Relax the muscle and repeat 20 times.



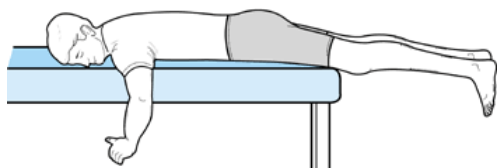
## 2. Straight Leg Raise

While sitting or lying down, tighten thigh muscles and slowly lift the leg in the air and lower it back down with the knee in a straight position. Repeat 20 times.



## 3. Prone knee extension hang

Lay on stomach on bed with legs hanging off the side of the bed starting at the knee. Relax the legs in a straight position and gravity will pull the knees straight. Hold this position for 5 minutes. Increase time as tolerated.



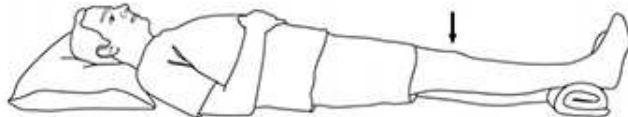
## 4. Gravity knee extension

Sit in chair and place lower leg on coffee table/additional chair leaving the knee and upper calf area free. Gravity will pull the knee straight. Start with 5 minutes and increase length as tolerated. May push down on knee to help it straighten or add weight to mid-thigh area. (i.e. tie two empty milk jugs together with a towel, fill the milk jugs with water for additional weight, then drape towel over mid-thigh to help with knee extension)



### 5. Hanging Knee extension

While lying down, place a rolled up towel underneath heel with the knee straight. Initially stay in this position for 5 minutes and increase time as tolerated.



## Additional Exercises:

### 1. Breathing Exercises

These exercises are important to help prevent pneumonia (lung infection) following surgery. Perform this exercise by inhaling a deep, slow breath in through the nose completely filling the lungs. Then slowly exhale through the mouth. Do this exercise 10 times every hour while awake the first 1-2 weeks following surgery.

### 2. Ankle pumps

This exercise will contract the calf muscles to keep the blood circulating out of the legs and help prevent blood clots from forming. Pull the foot up as far and you can and then point the toes to the ground. Repeat 20 times.



### 3. Adductor sets

While sitting or lying, squeeze a towel roll/pillow/soft ball between knees to tighten inner thigh muscles. Hold for 5 seconds, then relax. Repeat 20 times.



### 4. Abductor sets

While lying down, keep knees straight and toes pointed up to the ceiling. Slide involved leg out as far as possible away from your body. Then return the leg to the starting position. Repeat 20 times.

